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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,661	12/20/2001	Duane S. Treybig	7560 ONES	1640

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EXAMINER

METZMAIER, DANIEL S

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 04/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,661

Applicant(s)

TREYBIG ET AL.

Examiner

Daniel S. Metzmaier

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 51-59 is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☒ Claim(s) 49 and 50 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 1-59 are pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 41 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 41 defines R-Z as an alkyl group substituted with and mixtures thereof. It is unclear where in the original specification applicants set forth mixtures of substituents for Z, i.e., mixtures of Z in a single compound.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-14 and 41-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 contains improper Markush language. Proper language is "selected from the group consisting of A, B, and C". Furthermore, it is unclear where the first and the second reactant of the reaction product end.

Claim 41 sets forth R-Z as an alkyl group. R is an alkylene group in the structures. Structures (c), (e) and (f) lack proper valency of NH-.

Allowability of Subject Matter Withdrawn

5. The indicated allowability of claims 4-14, 17-27 and 30-48 is withdrawn in view of the newly discovered reference(s) to Marten et al, US 5,585,446. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by McCoy et al, US 4,396,499. McCoy et al (example IV) discloses the polymeric reaction product of Jeffamine® M-360 with EPON® 828. Although the claims set forth an amine capping group, said amine capping group is indistinct from the Jeffamine® M-360 as the first amine-containing monomer.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCoy et al, US 4,396,499. McCoy et al (example IV) discloses the polymeric reaction product of Jeffamine® M-360 with EPON® 828. Although the claims set forth an amine capping group, said amine capping group is indistinct from the Jeffamine® M-360 as the first amine-containing monomer.

McCoy et al differs from claim 1 in the terminal butoxy ether rather than a methyl ether.

Structural similarities have been found to support a *prima facie* case of obviousness. See, e.g., In re Wilder, 563 F.2d 457, 460, 195 USPQ 426, 429 (CCPA 1977) (adjacent homologs and structural isomers). The terminal capping ether is not critical as is evidenced by applicants multiple permutations of possible reactants. It would have been obvious to one having ordinary skill in the art at the time of applicants' invention to employ methoxy ethers for the butoxy ethers taught in the McCoy et al reference as functional equivalents.

McCoy et al differs from claims 28 and 29, wherein the reactive epoxide is an epoxidized olefin having two epoxides groups.

McCoy et al (column 2, lines 1-9 and 25-34) teaches the epoxides may include diepoxides having terminal epoxides groups linked by an aliphatic group. Said structure reads on diepoxides derived from a epoxidizing a diolefin. Since it is the product under consideration rather than the method said product is made, claims 28-29 are indistinct from the diepoxides as characterized in column 2, lines 1-9 and 25-34, of the McCoy et al reference.

It would have been obvious to one having ordinary skill in the art at the time of applicants' invention to employ diepoxides as taught in the McCoy et al reference as functional equivalents.

11. Claims 1-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marten et al, US 5,585,446. Marten et al (abstract; column 3, lines 54 et seq; column 4, lines 23 et seq and column 4, lines 56 et seq; column 7, lines 32 et seq; examples; and claims) disclose epoxy resin compositions, which react to form the polymeric reaction product. Said composition comprising JEFFAMINE monoamines (see claims 21 and 22), and aliphatic polyepoxides. Marten et al (column 7, lines 32 et seq) clearly contemplates reactants having tertiary amines and having two amino hydrogens and a tertiary amine, eg, N-aminoethylpiperizine. Marten et al discloses the polymers broadly employing reactant species reading on applicants species.

Marten et al differs from the compositions in the exemplified compositions having each of the species in the claimed combinations or the compositions with sufficient specificity.

It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ the individual agents and/or components or combinations of said agents and/or components for their disclosed advantageous function taught in the Marten et al reference.

Allowable Subject Matter

12. Claims 51-59 allowed.
13. Claims 49-50 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
14. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose or fairly suggest the polymer compositions claimed in the methods of preparing and treating oils.

Response to Arguments

15. Applicant's arguments filed Jan. 5, 2005 have been fully considered but they are not persuasive.
16. Applicants (page 17) assert McCoy et al employs diamines. McCoy et al (example IV) employs JEFFAMINE M-360, wherein the M denotes a monoamine. McCoy et al (example IV) sets forth the structure of said monoamine corresponding to

butoxy(polyethoxy)propylamine. McCoy et al clearly contemplates 2 amino hydrogen reactants.


17. Regarding applicants' (page 19) arguments that McCoy et al et al discloses diamines having 4 amino reactive hydrogens. McCoy et al (example IV) employs JEFFAMINE M-360, wherein the M denotes a monoamine. McCoy et al (example IV) sets forth the structure of said monoamine corresponding to butoxy(polyethoxy)propylamine. McCoy et al clearly contemplates 2 amino hydrogen reactants.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Daniel S. Metzmaier
Primary Examiner
Art Unit 1712

DSM